

REMARKS

Claims 40-68 are pending in the present application. These claims track the prior claims, but have been reorganized and revised for clarity. Independent Claim 40, which corresponds to prior Claim 10, has been amended to require that the ferulic, chlorogenic, and caffeic acids be isolated or purified. Support for this amendment is found in the specification, for example, on page 6, lines 7-11 (ferulic acid) and page 9, lines 3-8 (chlorogenic and caffeic acids). The functional effects of this combination on blood pressure are described on page 3, last few lines-page 4 of the specification.

Support for Claims 41-68 may be found in the original disclosure as follows: Claim 41 (Claim 10), Claims 42-46 (Claims 2-6, respectively), Claims 47-52 (Claim 7, page 10), Claims 53-58 (Claims 11-16, respectively), Claims 59-62 (Claims 2-4), and Claims 63-68 (Claims 11-16, page 10). Accordingly, the Applicants do not believe that any new matter has been introduced.

The Applicants thank Examiner Hawes for indicating that claims directed to isolated or purified ferulic, chlorogenic and caffeic acids would be considered as possibly distinguishing the invention from prior art compositions which contain impure mixtures of numerous natural ingredients. As requested, support for these new limitations has been pointed out above. Favorable consideration and allowance of this application is now respectfully requested.

Double Patenting

Claims 2-6, 10-16, and 30-39 were rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No.

6,310,100 B1. The Applicants respectfully request that this rejection be held in abeyance pending the identification of otherwise allowable subject matter.

Rejection—35 U.S.C. §103

Claims 2-6, 10-16 and 30-39 were rejected under 35 U.S.C. 103(a) as being unpatentable over Abraham, Fd. Chem. Toxic. 34:15-20 (XP-001148404), in view of Hsu, U.S. Patent No. 5,958,417, and further in view of Ghai et al., U.S. Patent 5,955,269. These documents do not render the present invention obvious, because they do not disclose or suggest the composition or methods of the present invention which consist essentially of isolated or purified ferulic acid in combination with isolated or purified chlorogenic and/or caffeic acid in an amount sufficient to lower blood pressure or prevent a rise in blood pressure.

Abraham, Table 1, page 16, refers to oral pretreatment of Swiss albino mice with a combination of chlorogenic acid, caffeic acid, ellagic acid and ferulic acid and is concerned with the potential antioxidant, anti-genotoxic and anti-cancer properties of this composition. Unlike the claimed compositions, the composition (Code D) of Abraham also contains isolated ellagic acid as an essential component. Abraham does not disclose a composition consisting essentially of ferulic acid and chlorogenic acid or caffeic acid which lowers blood pressure.

Moreover, Abraham does not disclose the food products of Claims 46-52 which have been supplemented with ferulic acid and chlorogenic and/or caffeic acid, nor the methods for treating hypertension or for reducing blood pressure of Claims 53-68.

Hsu was cited as disclosing the functional activity of a herb, *Crataegus* (hawthorn), on hypertension (Fig. 1). While Hsu indicates that *Crataegus* contains various active

principles, including ferulic, chlorogenic and caffeic acid (col. 2, lines 55-64), it does not indicate which of the many components of this herb are effective to treat hypertension, nor suggest that isolated ferulic acid in combination with isolated chlorogenic acid and/or caffeic acid would exert these effects. Thus, Hsu provides no suggestion or reasonable expectation of success for the present invention which employs isolated ferulic, chlorogenic and caffeic acids to reduce high blood pressure.

Ghai, col. 25, lines 1-3. col. 23, lines 43-50 and col. 27, lines 19-25, was cited as teaching nutraceutical compositions and fortification of foods with nutraceutical ingredients. Col. 23, lines 43-50 (Table 1) refer to various examples of food substances that may be employed as nutraceuticals. These foods include coffee, soybeans, and fruits which contain phenolic acids such caffeic acid, chlorogenic acid ferulic acid, and rosmarinic acid. However, like Hsu, Ghai provides no suggestion or reasonable expectation that isolated ferulic acid in combination with isolated chlorogenic and/or isolated caffeic acid would reduce blood pressure or suggest that these isolated acids be added to foods. Accordingly, the Applicants respectfully submit that this rejection would not apply to the present claims.

CONCLUSION

In view of the amendments and remarks above, the Applicants respectfully submit that the present application is now in condition for allowance. Early notification of such action is earnestly solicited.

Respectfully submitted,

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